

v1.01.1 | 01.02.2022

Top bar of the display

General correctness

- ✗ if the table of **Parameter correctness** includes is at least one ✗
- ? if the table of **Parameter correctness** includes is at least one ?, but there is no error (no ✗)
- ✓ if all measured parameters in the table of **Parameter correctness** are correct

1 2 3 4 5 6 7 8

16:59:20 | 2016-07-20 | H | ✓ | F-x | 3.7 GB free | USB Stick status | Battery status and external supply

1 Current date and time
2 Hold/continue button of display refreshing
3 Parameter Correctness
4 Recording status
5 Actual current probes connected
6 Free memory on SD card
7 USB Stick status
8 Battery status and external supply

Measuring inputs

Currents - 4 channels
Flexible: **Fx(A): 1...3000 A**
CT: **C-4: 1...1000 A**
C-6: 0.01...10 A
C7: 0.1...100 A

Voltages - 5 channels
A, B, C, N, GND
AC: **MAX 760 V_{RMS}**
DC: **±1150 V**
referred to protective earth terminal (GND)

External power supply

DC supply input
12 V ± 10% max. 2.5 A

Power adapter input 12VDC

USB slot for PC connection

USB slot for pendrive

Recording START button

Recording / charging LED indicator

External power supply
CAT II 300 V
100 to 240 V AC, 50 to 60 Hz
12 V 2.5 A DC

Cover

microSD card slot

Current clamp inputs A, B, C, N

Voltage measurement inputs A, B, C, N, GND

ON/OFF button

Sonel® PQM-707

Battery

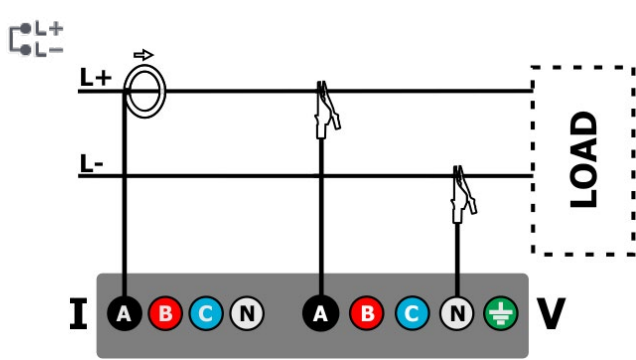
Li-Ion BATTERY

10.8 V
3.35 Ah

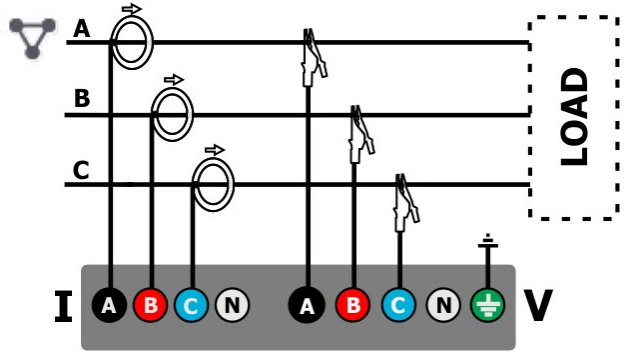
1 2

Connections

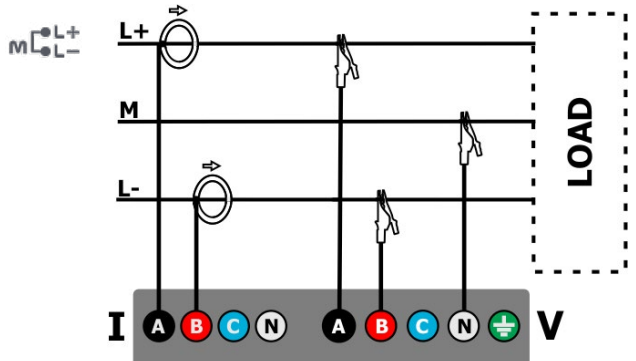
DC system



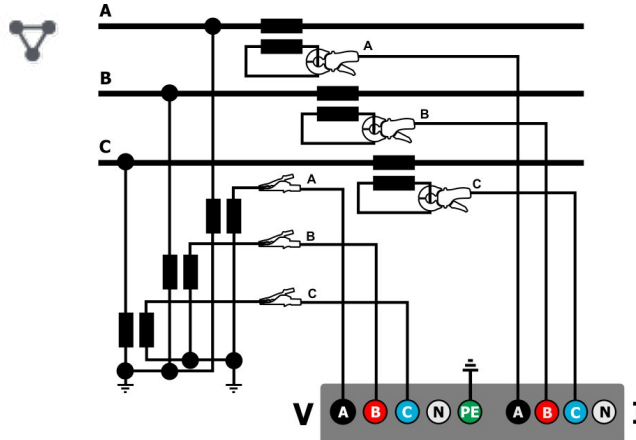
3-phase 3-wire



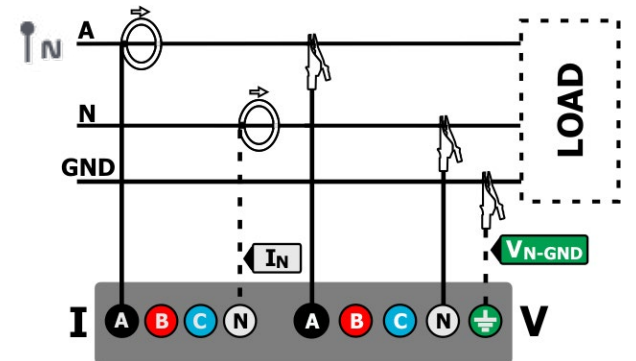
DC+M system



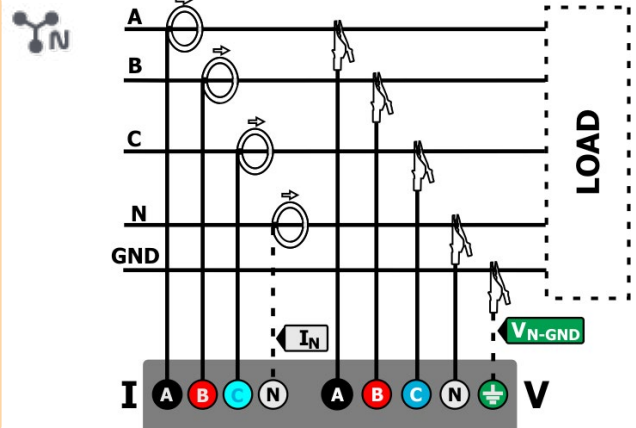
3-phase 3-wire (CT, VT)



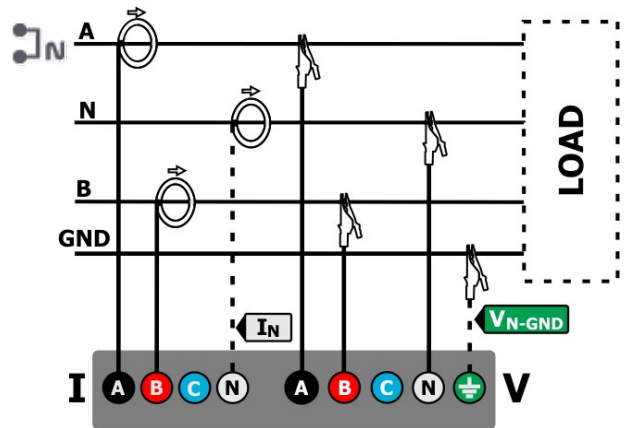
1-phase



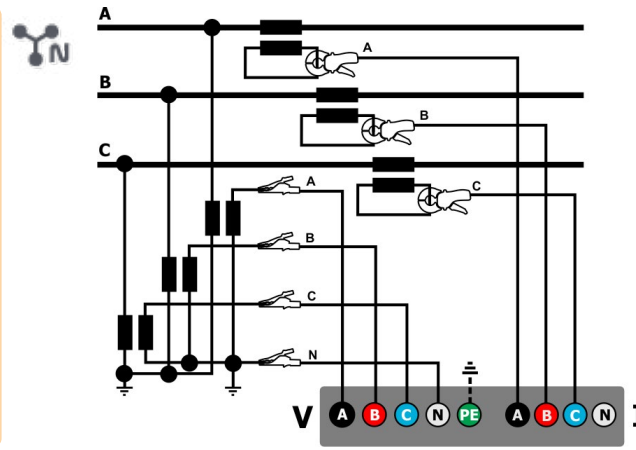
3-phase 4-wire



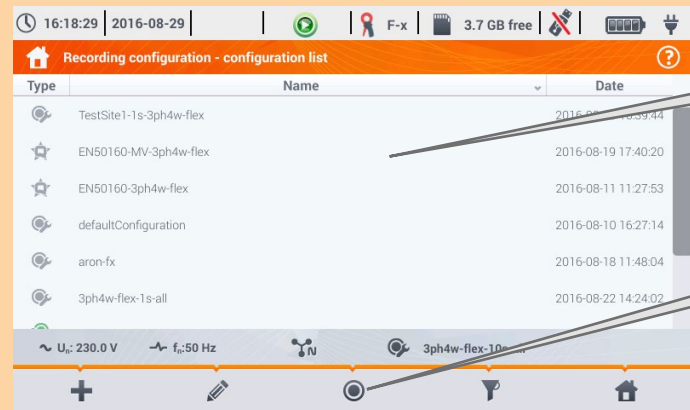
Split-phase



3-phase 4-wire (CT, VT)



1 Select a configuration from list



Select configuration from list

Set configuration as active

2 Connect signals

3 Start recording

Press START/STOP



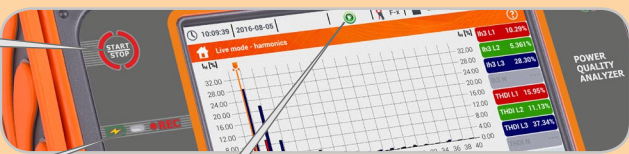
LED starts to blink RED

Status icon changes color to red

Buzzer signals are heard: 3 short signals

4 Stop recording

Press START/STOP



LED does not blink anymore

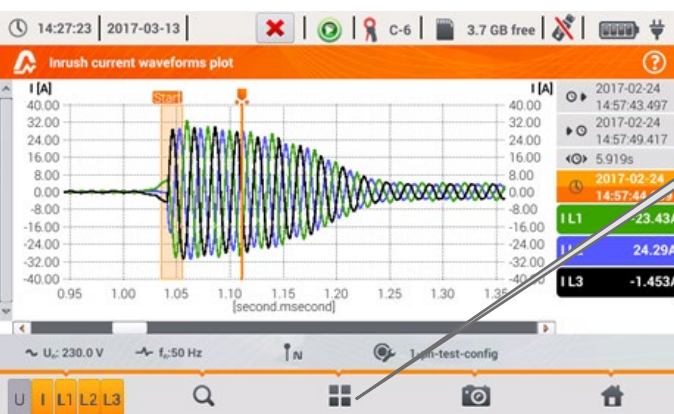
Status icon changes color to green

Buzzer signals are heard: 1 long + 3 short signals

1 Configure the measurement

- Connection of the meter
- Configuration of
 - L mains system
 - L frequency
 - L probes type
 - L measurement duration
 - L nominal current and trigger threshold

3 Analyse waveform plot



menu bar
waveform
RMS plot
characteristics

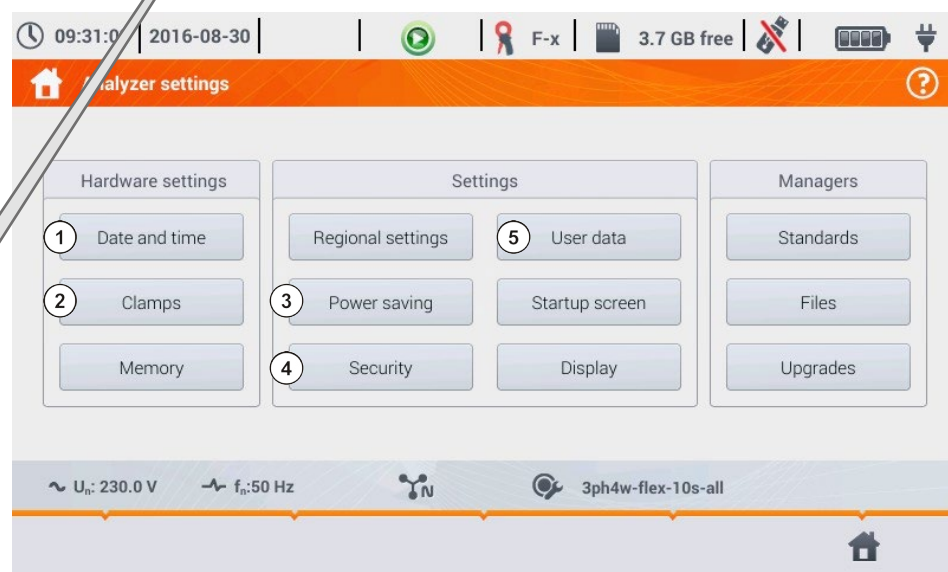
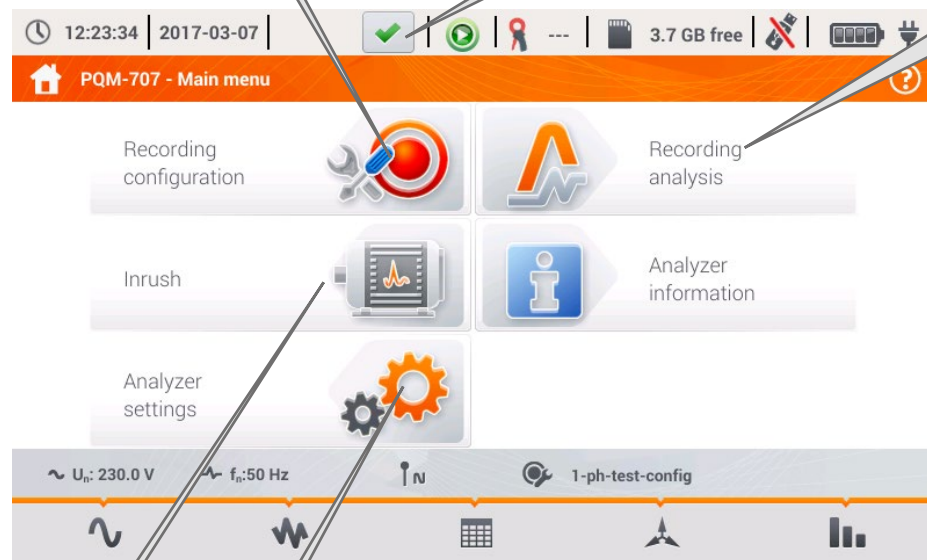
Before measurement adjust settings

- General settings (I and II)
- Voltage parameters
- Current parameters
- Power parameters
- Energy and factors
- Flicker and unbalance
- THD and harmonics
- Save over own name and select as active

Parameters correctness

Voltage values ✓
Current values ✓
Voltage phasors ✓
Current phasors ✓
Frequency ✓

OK



1 Set date and time

- YYYY-MM-DD or MM/DD/YYYY
- hh:mm:ss

2 Set current probe direction



3 Power saving

- Instantaneous auto-off mode
- Instrument auto-off mode

4 Security

- Set lock analyzer PIN

5 User data

- User specification, contact and address

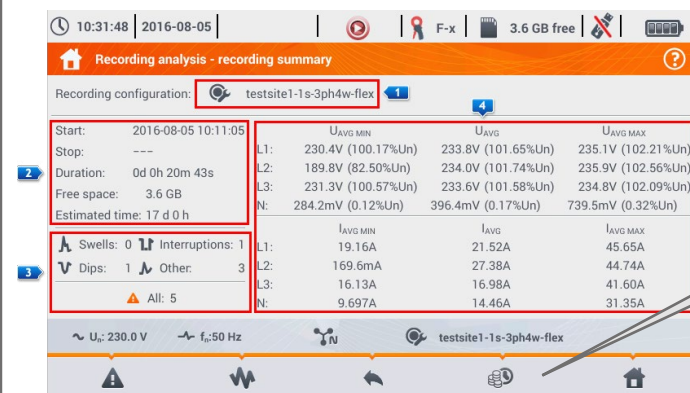
List of recorded measurements

Type	Name	Size	Date
EN50160-MV-3ph3w-c6		3.9 MB	2016-09-22 14:34:58
EN50160-1ph-c6		2.2 MB	2016-09-12 12:03:00
1ph-1s		6.1 MB	2016-08-25 16:53:18
1ph-1s		5.7 MB	2016-08-24 18:27:06
EN50160-1ph-c6		2.2 MB	2016-08-19 17:33:42
1-phase-voltage-10s		44.7 MB	2016-08-10 10:11:05

Select a measurement file from list

Analysis of the selected recording

2 Recording summary window



- 1 Configuration name
- 2 History of recording

- 3 Statistics of events
- 4 Statistics of Voltage and Amps measurement

- go to list of events
- go to plots
- timeplots
- harmonics
- go to standard report (only for configuration acc. to standard)
- go to energy costs calculator (only for configuration acc. to user)

Analysis of events

- Swells
- Dips (sags)
- Interruptions
- $I > \max$
- $I < \min$
- $V_{DC} > \max$
- $V_{DC} < \min$

Report according to standard

Before recording

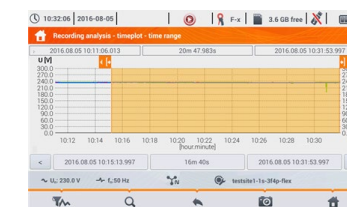
User data Enter personal information

After recording

Enter report settings

Timeplot of trends

- Set:
- start time
 - duration
 - end time



Bargraph of harmonics



Energy cost calculator

